

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Rick Henschel on May 27, 2010.

The application has been amended as follows:

Cancel without prejudice withdrawn claim 18.

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance: The claims are drawn to HLA typing of HLA-S to generate subgroups A to O by determination of short DNA sequence elements on both parental alleles at a set of multiple selected positions in the HLA-A gene by hybridizing a combination of primers to all known sequences variants to a DNA upstream of a given position, performing primer extension substituting at least one of the four dNTPs with a terminating analog and analyzing the products by mass spectrometry. The closest prior art is Warrell et al. (Analytical Chemistry vol. 72:5233-5238 2000) and Rozemuller ("Reference panels for sequence based typing: Selection criteria for HLA-A and HLA-B", Technical Manual International Histocompatibility Working Group, 2000). Warrell et al. teach a method for HLA typing by mass spectrometry. Warrell et al. use primer oligomer base extension combined with matrix-assisted laser desorption/ionization time of flight mass spectrometry to characterize HLA polymorphisms in both parental alleles. Rozemuller teaches the polymorphic positions in HLA-A and HLA-B. However, even though HLA typing is well known in the art and the polymorphic positions are disclosed by Rozemuller it is not obvious to use the specific combinations of positions recited for the typing of HLA-A. There is no reason or motivation provided for

Art Unit: 1637

a skilled artisan to choose one specific subset of 10 positions over any other specific subset of 10 positions.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Correspondence

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather G. Calamita whose telephone number is 571.272.2876 and whose e-mail address is heather.calamita@uspto.gov. However, the office cannot guarantee security through the e-mail system nor should official papers be transmitted through this route. The examiner can normally be reached on Monday through Thursday, 7:00 AM to 5:30 PM.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Gary Benzion can be reached at 571.272.0782.

Papers related to this application may be faxed to Group 1637 via the PTO Fax Center using the fax number 571.273.8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to 571.272.0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

/Heather G. Calamita/
Primary Examiner, Art Unit 1637